

Nazanin Mehrasa

Department Of Computer Engineering And Information Technology Amirkabir University Of Technology

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RESEARCH INTERESTS

- Machine Learning
- Data Mining
- Statistical Machine Learning
- Artificial Intelligence

EDUCATION

- **Amirkabir University of Technology** (Tehran Polytechnic), Tehran, Iran
B.Sc, Computer Engineering, *Sep. 2011 - June 2015 (expected)*
 - Cumulative Grade Average till now for:
 - * Total 110 units: **18.28/20**
 - * Last year courses: **19.28/20**
 - * Last semester: **19.93/20**
- Nemune Andishe High School, Sirjan, Kerman, Iran
Diploma in Mathematics and Physics, *Sep. 2007 - Sep. 2011*
 - Cumulative Grade Average:
 - * total: **19.91/20**

HONORS AND AWARDS

- Ranked in the top 2% to 5% among about 102 students of Computer Engineering Department, up to now.
- Awarded as Outstanding Student in Amirkabir University of Technology, Tehran, Iran, 2011.
- Eligible to choose second major due to outstanding performance, 2012.
- Admission to Graduate Program (M.Sc.) at the Computer Engineering and IT Department, Amirkabir University of Technology, without taking the National Entrance Exam for Graduate Schools as a reward of achieving high GPA among Computer Engineering Students Entered 2011.
- Top 0.5% among all applicants for the University Entrance Nationwide Exam (Approximately 300000 applicants) Iran, 2011.

PUBLICATIONS

- Fatemi,B., Kazemi,S.M., and Mehrasa,N., "Rating and Generating Sudoku Puzzles based on Constraint Satisfaction Problems", International Conference on Computer Science and Technology (ICCST),2014. To appear.

Notable Coursework And Technical Reports

- Mehrasa, N. and Fatemi, B., Solving, Rating and Generating Sudoku Puzzles using Genetic Algorithm" "Artificial Intelligence" course, Tehran, Iran, 2014. (in English)
- Mehrasa, N. and Fatemi, B., Technical report for implementing a static search engine; Algorithm, methods, and reasons of its usage, literature reviews for "Information Retrieval Systems" course, Tehran, Iran, 2014.

- Mehra, N., Fatemi, B., Mazlumian, Prediction of the probability of car purchase” _project report for Data Mining” course: using classification algorithms, Tehran, Iran, 2013.

TEACHING EXPERIENCES

- **Teaching Assistant , Data Structures,** *Fall 2013*
Under supervision of Prof. Dehghan
- **Teaching Assistant , Computer Architecture,** *Spring 2014*
Under supervision of Prof. Zarandi
- **Teaching Assistant, Design of Algorithm,** *Fall 2014*
Under supervision of Prof. NickAbadi

RESEARCH EXPERIENCE

- International Data Mining Competitions: A team-based effort to participate in 15th Data Mining Cup Competition for generating a prediction of the probability that a certain purchase is converted into a return on the basis of new purchase data of the shop, from Spring 2014. Weka, Java, Matlab, and MySQL were used.

NOTABLE ACADEMIC PROJECTS

- **Artificial Intelligence,**
Sudoku: Solving, Rating and generating Sudoku Puzzles using Genetic Algorithm. (Java)
- **Data Mining,**
CarPurchaseDM: prediction of the probability that a car is purchased in a car store. (weka, Matlab, java)
Data Mining Classification: Implementation of Decision Trees and K-Nearest Neighbor. (java)
DMC project: generating a prediction of the probability that a certain purchase is converted into a return on the basis of new purchase data of the shop. (Weka, Matlab, Java, MySQL)
- **Information Retrieval,**
AUTengine: A document retrieval system using both traditional Tf-idf method and Patricia for content-based document retrieval. (Java)
- **Programming Languages,**
mArith: Simple programming language. (OCaml)
- **Database Systems,**
HospitalDB: Design and implementation of a relational database for hospital. (MySQL).
iTunesDB: Design and implementation a software similar to device and media management of iTunes. (java, MongoDB)
- **Design of Algorithms,**
Maximum Flow: Implementation of a java application to allocate works to applicants using Maximum Flow algorithm. (java)
- **Machine Language Programming,**
DES: Developing a previously dominant algorithm for the encryption of electronic data called DES. (Mips assembly language)
ADC: Implementation of an analog to digital converter (Mips assembly language)

- **Advanced Computer Programming** ,
Age of Empires: a network-based replica of Age of Empires game. (Java)
Pac-Man: Implementation of "Pac-Man" game. (Java)

TECHNICAL SKILLS

- **Proficient in:**
Java, Weka, MATLAB, Mips and ATmega16 assembly, MySQL, and MongoDB.
- **Fairly familiar with:**,
C, SimpleScalar, ML, Ocaml, and Microsoft SQL Server.
- **Having experience of working with:** ,
LaTeX, Wireshark, Boson NetSim, ModelSim.

Languages

- **Persian** (Farsi): *Mother tongue (Native)*
- **English:TOEFL iBT** registered for the November 15, 2014 test.
- **Arabic:** Fair in reading and listening

HOBBIES

- Karate.
- Badminton.
- Painting.

REFERENCES

- **Professor Shahram Khadivi**
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- **Professor Ahmad Nickabadi**
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- **Professor Mehdi Dehghan TakhtFooladi**
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